PTINOSPHAERUS, A NEW GENUS OF PTINIDAE (COLEOPTERA) FROM NORTHERN QUEENSLAND

By Xavier Belles* and John F. Lawrence†
*Instituto de Quimica Bio-Organica Consejo Superior de Investigaciones Científicas,
Barcelona, Spain
†Division of Entomology, CSIRO, P.O. Box 1700, Canberra City, A.C.T. 2601

Abstract

A new genus *Ptinosphaerus*, with a single new species *P. marginicollis*, is described from northern Queensland and compared with *Pitnus* and other genera of *Ptinidae*.

Introduction

The Australian ptinid fauna consists of about 70 species, including 18 autochthonous *Ptinus*, 43 Ectrephinae, *Pitnus australiae* Lea, and several introduced species in the genera *Ptinus*, *Niptus*, *Trigonogenius*, *Mezium*, and *Gibbium* (Hinton, 1941; Lawrence and Reichardt, 1969; Lea, 1917, 1923). The present paper describes a remarkable new species from Cape Ynrk Peninsula, which appears to be related to *Pitnus australiae* but differs from this and all other species of Ptinidae by having sharp lateral edges on the pronotum (compare Figs 2 and 3).

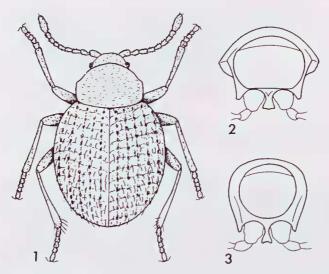
Ptinosphaerus gen. n.

Type-species.-Ptinosphaerus marginicollis sp. n.

Eyes small, oval, convex. Antennae 9-segmented, more or less filiform, with last segment elongate and club-like; insertions moderately widely separated, with a flat, even space between them. Maxillary and labial palps with last segment subacuminate. Prothorax strongly transverse; anterior edge strongly rounded; sides subparallel, with distinct, acute, lateral edges (Fig. 2); posterior edge weakly rounded; disc moderately convex, finely punctate. Scutellum not visible. Elytra slightly longer than wide; sides strongly rounded; disc strongly convex, with seriate punctation. Hindwings absent. Procoxae (Fig. 2) narrowly but distinctly separated by sternal process, which extends ventrally almost to coxal apices. Mesocoxae widely separated, the distance between them about 1.5 times as long as greatest coxal diameter. Metasternum strongly transverse; metacoxae slightly more widely separated than mesocoxae. Legs fairly slender, with femora slightly thickened at distal end; all tarsi 5-segmented in both sexes. Visible portion of abdomen about 0.8 times as long as basal width, strongly and abruptly narrowed at apical third; sternite 6 (4th visible sternite) much shorter than the others, its lateral portions produced posteriorly and partly enclosing base of sternite 7.

Ptinosphaerus marginicollis sp. n. (Figs 1-2, 4-5)

Types.—Holotype, Grindle (?) Beach, south of Portland Roads, near Iron Range (12°42'S 143°18'E), QUEENSLAND, 16.x.1968, on beach, probably among seaweed (D. D. Giuliani) (ANIC No. 82). Paratypes, 2, same data as holotype (ANIC, X. Belle's Collection).



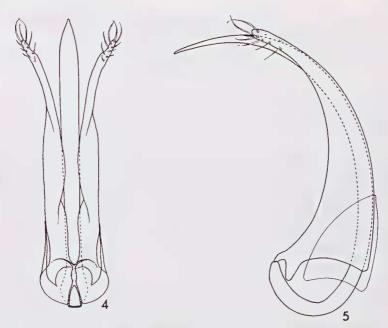
Figs 1-3. (1) Ptinosphaerus marginicollis sp. n., male, dorsal view; (2) same, cross-section of prothorax; (3) Pitnus australiae Lea, cross-section of prothorax.

Black. Surface more or less shining. Vestiture consisting of moderately sparse and evenly distributed, fine, suberect, curved, yellow hairs. Antennae relatively short, less than half as long as body; segments longer than wide, progressively shorter from 1 to 8; segment 9 longer than preceding two combined; antennae separated by distance 1.5 times as great as the length of antennal segment 1, the space between them flat and even. Pronotum about 0.7 times as long as greatest width; punctation fine and moderately sparse; interspaces smooth. Elytra about 1.1 times as long as greatest combined width and 2.1 times as long as pronotum; elytral punctation coarse, the punctures forming regular rows, usually joined by transverse impressions; fine sculpturing consisting of irregular, minute, scratch-like markings. Aedeagus with median lobe, as seen from side (Fig. 5) forming broad curve and acutely pointed at apex; parameres (Fig. 4) abruptly narrowed at apical third, subacute at apex, which bears several setae.

Length 1.0 - 1.1 mm.

Discussion

Ptinosphaerus appears to belong to the Sphaericus group of genera (Sphaericus, Niptus, Wollastonella, Pitnus), as defined by Bellés (1982), but it is easily distinguished by the short and broad prothorax with sharp lateral edges, a feature unique in the Ptinidae (compare Figs 2 and 3). It resembles Pitnus and differs from other members of the group in having the abdomen sharply narrowed posteriorly and in the structure of the aedeagus. It differs from Pitnus species, not only in the sharp lateral pronotal edges, but in having



Figs 4, 5. Ptinosphaerus marginicollis, aedeagus, (4) dorsal view; (5) lateral view.

a much shorter and broader prothorax, which is about two-thirds as wide as the combined elytral width, and a vestiture of much finer hairs. *Pitnus australiae* is further distinguished from *Ptinosphaerus* by the 8-segmented antennae (9-segmented in New World species). Although the collector (in litt.) said that specimens of *P. marginicollis* may have been associated with dead seaweed, it is also possible that they occurred among dune vegetation; Lea (1923) reported that *Pitnus australiae* was found on saltbushes (*Atriplex*) near beaches in Western Australia and South Australia.

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